Bovine TB in the pilot badger cull zone in Gloucestershire

Torgerson, Paul R

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In their letter to the Veterinary Record of May 16, 2015, vol 176, page 537, Mr Blowey and others correctly observe that there has been a decrease in the number of total reactors in the Western Region from 2013 to 2014. They also observe that in the cull areas of Gloucestershire, Hereford/Worcester and Somerset the decrease is considerable and muse over the coincidence that these are in the cull zones. They conclude by speculating that not only has the cull not led to an increase in bovine TB, but indeed rather the opposite.

When making such speculative statements, it is essential not to look at the 2 years of data in isolation. The trend, before the pilot badger culls were implemented, was for a decreasing number of reactors (see Table 1). In the Western Region, between 2008 and 2013 the number of reactors decreased from 20,725 to 17,822, without the help of badger culls. In Gloucestershire for example, it decreased from 2,433 to 1,622. Also within this data between successive years there is a huge amount of variability. For example, between 2009 and 2010 the numbers of reactors decreased in Gloucestershire from 2268 to 1604 – a decrease of 664 when there was no badger cull. On the other hand the decrease in reactors between 2013 and 2014 that Mr Blowey and colleagues implies is due to the cull is just 469. Somerset on the other hand has had reactor numbers bouncing around between a minimum of 1235 in 2009 and a maximum of 2389 in 2013 with no evidence of any trend either up or down regardless of badger culls. Indeed the drop to 1576 in 2014 may only be a case of reverting to the mean values seen between 2008 and 2012, with 2013 being an exceptionally high year. The only conclusion that can be drawn is from the total Western Regional data. Here, there appears to have been a modest decline in the numbers of reactors between 2008 and 2014 and this started well before the pilot badger culls were implemented. Also within this decline there is sizeable variability from year to year in individual counties. Hence it is far too premature to conclude that there is any correlation of reactor numbers with the presence or absence of the pilot culls, much less causality. It is essential to ensure that data is rigorously analysed and put into context before trumpeting the success or otherwise of a programme that has serious environmental, welfare and cost implications.

Reference

DEFRA (2015) Latest statistics on the incidence of tuberculosis (TB) in cattle in Great Britain. www.gov. uk/government/statistics/incidence-of-tuberculosis-tb-in-cattle-in-great-britain Accessed 15 may 2015

Paul Torgerson
Section of Epidemiology
Vetsuisse Faculty
University of Zürich
Switzerland

email: paul.torgerson@access.uzh.ch

Table 1. Number of reactors slaughtered by county between 2008 and 2014 (DEFRA 2015)

Year	Avon	Cornwall	Devonshire	Dorset	Gloucestershire	Hereford & Worcester	Isles of Scilly	Somerset	Warwickshire	West Midlands	Wiltshire	Total Western Region
2008	415	3,577	6,955	790	2,433	3,286	0	1,498	399	126	1,246	20,725
2009	541	3,640	6,700	638	2,268	3,240	0	1,235	298	67	1,209	19,836
2010	611	2,599	5,672	781	1,604	2,648	0	1,399	170	40	1,260	16,784
2011	681	2,715	5,946	1,005	1,780	3,188	0	1,918	239	2	1,532	19,006
2012	1,045	3,213	6,466	1,157	1,922	3,134	0	1,952	166	16	1,328	20,399
2013	1,090	2,692	5,203	896	1,622	2,570	0	2,389	194	14	1,152	17,822
2014	1,287	2,875	5,861	744	1,153	1,838	0	1,576	323	20	1,340	17,017